

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

Applicants: Gruber, et al.

Examiner: Bui, P.

Serial No.: 09/284,697

Group Art Unit: 1638

Filed: July 6, 1999

Docket: 1149-2

For: PANCREATIC LIPASES AND/OR
RECOMBINANT COLIPASES AND
DERIVED POLYPEPTIDES PRODUCED
BY PLANTS, METHODS FOR OBTAINING
THEM AND USE THEREOF

Dated: February 20, 2001

I hereby certify this correspondence is being de-
posited with the United States Postal Service as first
class mail, postpaid in an envelope, addressed to:
Assistant Commissioner for Patents, Washington, D.C.

20231 on February 20, 2001

Dated: 2/20/01 Grub M. Bui

Assistant Commissioner for Patents
Washington, DC 20231



AMENDMENT

Sir:

This Amendment is being filed in response to the Office Action mailed December 19, 2000. Applicants respectfully request that this Amendment be entered into the above-identified file.

RECEIVED
FEB 28 2001
TECH CENTER 1500/2900

Response to the Restriction Requirement

The Examiner has imposed a Restriction Requirement to one of thirty-six inventions under the provisions of 35 U.S.C. § 121. In response to the Restriction Requirement, Applicants provisionally elect the subject matter defined by the claims in Group I.

IN THE CLAIMS:

Please cancel Claims 1-26.

Please insert the following new Claims 27-56:

27. A recombinant nucleotide sequence comprising a sequence coding for an element of the pancreatic lipase-colipase complex, or a derivative of the element; a promoter; and a transcription terminator; wherein the promote and transcription terminator are recognized by the transcriptional machinery of the plant cells.

02/26/2001 AZERGAM1 00000174 09284697

02 FC:203

126.00 DP

28. The recombinant nucleotide sequence according to Claim 27 wherein the element of the pancreatic lipase-colipase complex is pancreatic lipase.

29. The recombinant nucleotide sequence according to Claim 27 wherein the element of the pancreatic lipase-colipase complex is colipase.

30. A recombinant nucleotide sequence comprising sequences coding for a pancreatic lipase and a colipase, or a derivative of either or both of the pancreatic lipase and colipase; a promoter; and a transcription terminator; wherein the promoter and transcription terminator are recognized by the transcriptional machinery of the plant cells.

31. A vector comprising the nucleotide sequence of Claim 27 or 30.

32. A host cell transformed by a vector in accordance with Claim 31.

33. ~~A method for obtaining an element of recombinant pancreatic lipase-colipase complex, or derivative of the element, wherein the method comprises: transforming a plant cell by incorporating the recombinant sequence according to Claim 27 into the genome of the cell; and recovering the element, or the derivative of the element.~~

34. The method of Claim 33 wherein the recovery comprises extraction.

35. The method according to Claim 33 wherein the element of the pancreatic lipase-colipase complex is pancreatic lipase.

36. The method according to Claim 33 wherein the element of the pancreatic lipase-colipase complex is colipase.

37. A method of co-producing recombinant pancreatic lipase and colipase, or a derivative of either or both of the pancreatic lipase and colipase, wherein the method comprises:

transforming a plant cell by incorporating the recombinant sequence according to Claim 30 into the genome of the cell; and recovering the recombinant pancreatic lipase and colipase, or derivative thereof.

38. The method of Claim 37 wherein the recovery comprises extraction.

39. A genetically transformed plant or part of the plant, wherein the plant or plant part contains at least one recombinant nucleotide sequence according to Claim 27 or 30.

*Cl
antid*
40. The plant part according to Claim 39 selected from the group consisting of leaves, fruits, seeds and plant cells.

41. The plant according to Claim 39 selected from the group consisting of colza, tobacco, maize, pea, tomato, carrot, wheat, barley, potato, soybean, sunflower, lettuce, rice, alfalfa and beetroot.

42. A recombinant pancreatic lipase, or derivative thereof, obtained by the method of Claim 35 or 37.

43. A recombinant colipase, or derivative thereof, obtained by the method of Claim 36 or 37.

44. A recombinant pancreatic lipase-colipase complex, or derivative thereof, obtained by the method of Claim 37.

45. A plant extract having enzymatic activity obtained according to Claim 33 or 37.

46. A pharmaceutical product comprising a plant, or a plant part, according to Claim 39,

47. A pharmaceutical product comprising a plant extract according to Claim 45.

48. The pharmaceutical product according to Claim 47 further comprising one or more pharmaceutically acceptable vehicles or excipients.

49. A method of treating pathology associated with deficient lipase production comprising administering the pharmaceutical product according to Claim 47.

50. The method according to Claim 49 wherein the pathology is cystic fibrosis.

Canceled
51. A method of treating a person with an eating disorder associated with deficient lipase production comprising administering to the person the pharmaceutical product according to Claim 47.

52. The method according to Claim 51 wherein the eating disorders is obesity.

53. A functional food which comprises a plant, or a plant part, according to Claim 39.

54. A functional food which comprises a plant extract according to Claim 45.

55. The food of Claim 54 associated with at least one other edible compound.

56. The food according to Claim 54 wherein the food facilitates absorption of animal or vegetable fats.

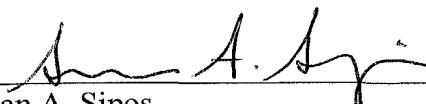
REMARKS

Claims 1-26 have been cancelled. Claims 27-56 have been added. Accordingly, Claims 27-56 are pending in this application.

No new matter was added.

In view of the above amendments and remarks, this application is now believed to be in condition for allowance. If the Examiner has any questions, she is respectfully requested to contact Applicants' undersigned attorney at the telephone number provided below.

Respectfully submitted,



Susan A. Sipos
Registration No. 43,128
Attorney for Applicants

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
SAS/jjc 126443_1